

Revision: 1 PURCHASING AGENT: JARED GARDNER

Item: PAINT STRIPER, TRUCK MOUNTED, SELF CONTAINED (NEW)

Vendor: 51589J TMT-PATHWAY

2490 EWALD AVE. SE SALEM OR 97302

Internet Homepage: www.tmtpathway.com

Telephone: (800) 253-2909

Fax number: (503) 370-4389

Contact: CHUCK WOLF

Email address: Www.tmtequipment@att.worldnet.net

Brand/trade name: TMT-707P

Price: SEE ATTACHED PRICE SCHEDULE

Terms: NET 30

Effective dates: 01/01/01 THROUGH 12/31/03

Days required for delivery: 90 DAYS

Price guarantee period: 1 YEAR

Minimum order: ONE UNIT
Min shipment without charges: INCLUDED IN PRICE

Other conditions: NO RENEWAL OPTIONS

REVISION #1: Updating the Vendor Contact Name.

REMITTANCE ADDRESS: 1675 COMMERCIAL ST. NE, SALEM OR 97302.

This contract resulted from bid DG1108

This contract covers only those items listed in the price schedule. It is the responsibility of the agency to ensure that other items purchased are invoiced separately. State agencies will place orders directly with the vendor (creating a PG in Finet) and make payments for the same on a PV referencing the original PG. Agencies will return to the vendor any invoice which reflects incorrect pricing.



TMT-PATHWAY:

TRUCK MOUNTED, SELF CONTAINED, HIGHWAY PAINT STRIPER, TO BE A NEW UNIT OF CURRENT MODEL. FOR APPLYING DUAL COLORS (WATER BASED OR SOLVENT BASED TRAFFIC PAINTS), GLASS BEADS, AND CAPABLE OF APPLYING INDIVIDUAL LINE WIDTHS 2" TO 12" PER GUN IN A SINGLE PASS. AGENCY. FURNISHED TRUCK CAB AND CHASSIS. TRUCK WILL BE A CAB FORWARD DESIGN MAC TRUCK MODEL MR688S WITH A GVWR OF 64,000 LBS. MINIMUM, AND A WHEEL BASE OF 209 INCHES.

1-MAKE/MODEL OF STRIPER TMT-707P. \$146,900.00 EACH

WARRANTY:

The striping unit shall be guaranteed against defective materials and workmanship for a minimum period of 12 months. Bid to state terms of warranty and include a copy of all warranty that pertain to striper. All warranty periods shall start after auxiliary equipment has been installed and truck is put into service. Warranty to allow for "in-house" work to be completed by U.D.O.T. mechanics and for reimbursement by manufacturer. Warranty will be considered in evaluating bids.

Warranty period: 12 MONTHS.

OTHER STRIPER COMPONENTS

Warranty period: 12 MONTHS.

The specified machine shall be capable of applying simultaneously three (3) 15 mil thick, 4" wide marking material line in two colors (white and yellow), solid or skip pattern, or a combination of these patterns and center and edge line markings. The machine shall be capable of applying the above lines at a minimum of 12 miles per hour at temperatures as low as 40 degrees Fahrenheit on dry clean pavement. It shall utilize an airless paint system.

All components which come in contact with paint, shall be made of stainless steel. Paint plumbing shall utilize new components of the latest design (Carbide ball seats and chrome check balls are unacceptable). The paint striper model shall be a proven machine, having already been manufactured and currently in use. The bed platform shall be made of steel step (safety tread) plate, and shall not exceed 102 inches wide except for the bay windows on the rear cab. The length shall be appropriate for the stated wheelbase on the cab forward design truck. The height shall not exceed 12'6" above the ground when installed on truck chassis. There shall be a maximum 4" Space between the chassis and the platform longitudinal for consideration of the center of gravity and to accommodate electrical and plumbing without interference with the truck frame.

There shall be easy access to all routine maintenance items, without unbolting plates, or removing equipment. All grease zerts shall be easily accessed. Safety, fold-up ladders are to be installed, positioning, at least one, on each side of bed. Access stairs shall be provided near center at rear of operator cab. Steel railing shall be bolted to platform, where necessary, to provide a safe working area.

A bumper is to be installed on rear of truck. It shall be a minimum of 6 inch-8.2 pound per foot steel structural channel extending the full width of the striper platform. Installed at approximately 18 inches above the road surface. It shall be bolted to longitudinal frame rails. One tool box, approximately 3 feet by 2 feet with weather tight door and slam type lock to be installed under the platform deck, on the curb side.

Air Comp.:

To have an air compressor with sufficient capacity to simultaneously operate all the air driven components, displacement of not less than 60 CFM @ 1800 RPM, 100 PSI. Belt drives are not acceptable. Piston type, hydraulic motor powered and to be directly coupled. Compressor will be equipped with an unloader, once full working pressure is obtained.

To have a minimum ten (10) gallon capacity ASME certified air receiver tank with a safety valve, air release valve, and drain valve (brass or stainless) plumbed into the air system.

To have a finned tube type air cooler assembly in the compressed air system to cool the air and enhance moisture separation.

To have a two stage air dryer, positioned for function and ease of maintenance will be included in the plumbing of the air system.

To have four (4) minimum, self expelling automatic moisture separators, one (1) in the main air supply line from the compressor mounted after the air cooler, one (1) just prior to the air inlets to the reflective media tanks, and one each on the left and right side of the striper prior to the compressed air manifolds to the gun cart solenoids.

Aux. Power:

Power, for an hydraulic systems, to be an independent water cooled, electric start, diesel fueled utility engine, 60 HP at 1800 RPM minimum, under full load. Separate fuel tank, 30 gallon minimum, shall be provided. Engine shall have an hour meter, tachometer, ampere or volt meter, oil pressure gauge and coolant temperature gauge mounted in rear control panel with by-pass switch (to divert hydraulic oil, for no-load starting). The engine shall be enclosed with sound insulated, critical silence muffler, but shall have removable or swing open doors for engine servicing. Controls will be installed in the rear operators console for all functions and additional controls shall be located next to the engine.

The auxiliary engine shall be equipped with both low oil and high temperature shut downs, and to have rear operators infinite controlled throttle.

Hydraulic Pumps:

To include auxiliary engine direct mounted pumps to run all hydraulic functions on the striper unit, including; air compressor drive carriage outrigger steering, paint pump drive, and any other striper required functions.

Hydraulic pumps properly sized and rated for required functions.

Indicator light with buzzer or alarm, for high hydraulic temperature (manufacturer's recommended setting), to be located on the control console located in the rear striper operator's compartment.

The hydraulic system must be designed to provide adequate flow and pressure at engine idle RPM and not cause overheating of hydraulic oil at full engine RPM. A minimum 100 gallon reservoir with baffles, breather cap, sight level gauge, and drain plug shall be provided.

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To include a removable 100 mesh screen in the hydraulic tank section outlet, sized for proper flow with replaceable spin-on filter with shut off valve, on the suction and return lines shall be provided.

Paint Heat System:

The striper shall be equipped with a heat system that will heat the paint to a temperature of 135 degrees Fahrenheit at an ambient temperature of 70 degrees Fahrenheit.

The heat system shall include a means to tap heat from the exhaust and auxiliary engine coolant, and two (2) eight inch heat exchanger with a heat transfer areas of 64 square feet per exchanger. The heat exchanger shall have stainless steel tubes, end and bonnets. There shall be one exchanger for white paint and one for yellow.

An expansion tank with 14 PSI automotive type pressure cap shall be provided along with a 1" circulation pump in the glycol system.

A temperature switch shall be provided to start and stop the flow of the heat transfer medium as the paint reaches temperature. A diversion valve shall be provided in the glycol system to control flow to the heat exchangers.

Temperature controls shall be located on the control console within easy reach of the paint striper operator. In addition to the temperature controls, temperature gauges shall be included to indicate temperatures of the glycol and the white and yellow paint as it leaves the heat exchangers.

An isolation heat exchanger shall be provided for the glycol system in the event a paint heat exchanger were to rupture and contaminate the glycol system with the paint.

A back pressure regulator shall be installed on the outlet side of the heat exchanger, which allows heated paint to circulate back through the diaphragm pump, while the system is not painting.

Paint System:

Design of the striper will be for returnable bulk containers (RBC's or totes). The striper will have the capability to carry two (2), fully loaded 250 gallon waterborne or 345 gallon VOC solvent, portable containers each.

Provision must be made for unheated paint to recirculate through the double diaphragm pump back to each RBC's. To have all the necessary hoses, ball valves and cam locks for recirculating.

To allow for loading from an RBC's on the ground or nurse truck, back into the RBC's on the striper through the bottom 2 inch outlet valve. The Striper platform will be designed and constructed to allow the transfer of the RBC's with a forklift.

These RBC's will have a base have the following minimum dimension, 48 X 48 inch base and approximately 52 inch height, including the base and protective top ring.

RBC's to have a hold-down clamping system.

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The striper must be plumbed so any combination of white or yellow paint may be loaded on the truck and the RBC's to drawn down evenly while striping.

All components in the paint holding and delivery system that come in contact with the paint shall be two (2)inch inside diameter 304 stainless steel, with the exception of flexible conductors. A compatible, quick connect valve hose connection that will facilitate the transfer of the paint in a minimum amount of time will be furnished. Any line reductions should be done in increments in order to reduce back pressure and problems with lines clogging. The paint lines at the guns and paint manifold must be equipped with full flow connect fittings.

All rigid low pressure plumbing will be two (2) inch schedule 10 socket welded stainless with bolt-up flange type valves and unions for access.

All valves should have the same on-off positions. They shall be Teflon seated stainless steel ball type valves and shall be color coded or clearly marked for identification.

To have a gallon-age metering device for each color, that does not come into contact with the paint. Complete calibration instruction shall be provided.

Paint Pumps:

To have two (2) ARO PD20-S-ASS-STT 2 inch pump which is all stainless steel with teflon diaphragms (paint pumps or equal).

The pumps will have stainless steel bodies with Teflon diaphragms.

Valve's will be provided to allow each pump to be isolated from the paint system for the purpose of cycling solvent through the pump for cleaning.

All pumps will be capable of pumping water based paint and paints containing toluene, xylene, methylene chloride, and mek.

Air supply lines for pumps to include regulators, gauges and oilers if necessary. Air valves shall be ball type and shall be color coded for identification.

Airless Pumps:

Two (2) hydraulic powered ARO or equal airless paint pumps will be provided. Which will perform at all high altitudes, which is 4000 feet or higher.

The pumps will each supply up to 12.9 GPM minimum continuous duty, at 1600 PSI. Paint to be delivered at pressures of 100 to 1,600 PSI.

Pumps to be double acting, delivery on up and down strokes assuring constant delivery. To have high pressure surge suppressor shall be provided on the discharge side of each high pressure paint pump.

Pumps to be positive displacement type.

Paint to be delivered at pressures of 100 to 1,600 PSI.

All parts which come in contact with paint shall be stainless steel, including



piston, check balls, seats, housing, and packing retaining rings, Packings shall be Teflon.

High pressure paint hoses to be non-conductive and rated in excess of 2,000 PSI.

Pressure control valves and gauges shall be provided in the rear console.

Spray Gun Carriage:

Two (2) spray gun carriages to be provided.

Spray qun carriages to be retractable to with-in the overall width of the vehicle and lifted off the roadway for high speed transport.

A pneumatic lift system, Auto-lock system and safety chains shall be provided for this purpose. When carriage is lifted, down pressure shall be disabled using a four way diverter valve.

Left & right spray gun carriage to be located to the front of the left and right rear tires.

Two (2) road wheels shall be provided for each carriage to maintain a constant given height from the road surface. The wheels shall be mounted approximately 18" apart.

Carriage units to be mounted with stainless steel slider bars to allow vertical motion while maintaining the spray guns at a constant height above the road surface. Each paint and bead gun shall have a threaded rod for adjusting vertical height and be capable of locking in position with no movement during operation.

Carriages must be capable of operating in any position from inside the platform width to a point four (4) feet outboard of this location. These shall be supported for adequate roadway clearance.

The road wheels on carriages shall be fitted with pneumatic tires, tapered roller bearings, dirt shields and mounted on castering mounts to allow them to pivot freely as vehicle is turned.

All bearings or pivot points on the carriage linkage or slide shall be fitted with replaceable bushings or anti-friction bearing and pressure lubrication fittings.

Each carriage slide to be equipped with a double acting hydraulic cylinder for moving the carriage to any point within its operating range. The cylinders to be controlled by a power steering control unit and steering wheel conveniently located for the operator.

The steering wheel shall tilt and adjust in and out to accommodate various operators.

Hydraulic power for operation of the carriages to be supplied by a hydraulic pump driven by the auxiliary engine.

The carriage steering mechanism must provide a smooth operation without oversteering, creeping or jerky movement.

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Each carriage shall have a four (4) inch amber flashing strobe mounted near the end. Each strobe shall not distract the operator. It shall flash horizontally at traffic approaching from all directions. It should flash at a rate of approximately 60 flashes per minute at least 150 candle power.

The striping carriages shall be capable of placing a centerline and edgeline simultaneously from eight to sixteen feet apart.

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Arrangement of Paint Guns on Left Carriage Guns on Right Carriage

Paint Guns:

The paint spray guns, Eight (8)(Graco 206-660 or equal) shall be of the air actuated, airless atomizing type, Spray-capable of processing material in quantities which Equipment will yield a four (4) inch width line of 0.018 wet film thickness, to be put down at speeds of up to 20 MPH. They should be designed for use in highway striping. All wetted parts, except tips, shall be stainless steel.

The paint system shall include two (2) temperature sensors at each heat exchanger.

The low pressure paint filters shall be an all stainless steel basket strainer with a minimum of 100 square inch surface area. The strainer's cap is removable allowing access to the basket. This cap is secured in position with three C clamps. A drain port will be included in each filter. This drain port will have a stainless steel valve plumbed in it to allow for the draining of the filter into a pail or bucket. Modified Y strainers will not be acceptable for this application.

High pressure filter plumbed between each airless paint pump and the spray guns shall be a high-pressure stainless steel fluid filter assembly, they shall be capable of handling fluid pressure to 5,000 PSI, and have ½ inch inlet and outlet ports.

The paint system shall be sealed and of such design that no shutdown or startup flushing is required.

The distance between the spray gun orifice and bead gun orifice must remain constant for all spray and color patterns to insure the proper angle of entry of the glass bead spray into the paint spray for maximum dispersion and retention.

The automatic bead guns shall be capable of dispersing 50 pounds per minute per gun with 8 pounds per gallon per gun with 60 pounds of air pressure on the bead tank.

The bead gun shall be chrome plated and mounted behind each spray gun.

Bead Tank:

To have an ASME certified pressure vessel having a total capacity of 6,000



lbs. Of glass spheres. This vessel shall be of all steel construction and shall have a top opening not less 24 inches in diameter. The top opening shall be easily opened and shall not require the use of tools. There shall be access to the top of the bead tank for loading bulk beads. The vessel shall be equipped with an air release valve, of 160 lbs. To have a pressure gauge and a 110 lbs. pressure relief valve. Air pressure gauge shall be mounted in console.

The beads shall be conveyed under pressure to the automatic guns through abrasion resistant hose and steel pipe.

A valve to shut off bead flow from the tank shall be provided. To be a knife type air activated with on/off controlled from the rear operators.

Bead Loading System:

A vacuum bead loading system with a minimum capacity of 200 pounds of glass beads per minute to be included in the glass bead supply system.

The glass bead loading system shall include a 12 foot long, 2 inch I.D. minimum fill hose with male and female quick coupler fittings on one end and a 36 inch long, 2 inch O.D. x 1 7/8 inch I.D. steel tube attached to the suction end. All hoses to be non-conductive or rubber.

The loading system shall be capable of loading from bulk bead containers. Bead loading shall be from curb side of the truck.

Control Center:

A master control center shall be provided. This center shall consist of a sheet metal cover with internal framework, providing space for a control panel, electrical controls, spray equipment connections, heater thermostat control, and any and all other auxiliary parts required by the spray equipment. A master control switch with the ability to disconnect and shut down all systems shall be located in the master control center. All controls shall be color coded for quick identification. All controls shall be clearly labeled and contain industrial/military type toggle switches. The control panel will be illuminated for nighttime.

Separate remote control panels will be provided for the left and right side operators. These control panels shall have adequate length wiring to allow for adjustment to accommodate various operators. An adjustable mounting shall be provided at each station for quick and easy adjustment.

The control panel must have height and side adjustment for mounting in any position for operator comfort. The mounting shall lock securely in place after adjustment. The wiring shall be attached at each end by pin connectors, to an electrical junction plug.

Left Side Operator. The left side operator shall have a control panel for the operation of the paint guns, bead guns, and control of left side carriage. Bead guns shall automatically turn on when paint guns are on, and delay shut off to completely cover paint lines. Through the operation of toggle switches, it shall be possible to apply a skip, solid, double solid, or skipsolid painted line.



Right Side Operator. The right side operator shall have available controls for the right side carriage, vertical and horizontal. Through the operation of toggle switches, it shall be possible to apply a skip, solid, double solid, or skip-solid traffic painted line.

When both the left and right carriages are being utilized to apply a skip pattern, the application of paint guns and bead dispensing guns shall be able to operate synchronized or independently.

The master control center shall be mounted in an inclined position so that it can be observed from either operator's position. It shall be painted flat black to decrease glare.

The master control center shall have all necessary regulators, gauges, valves, switches and indicators for operation of the striping equipment mounted on it. They should be within reasonable reach for either operator to control all functions.

All parts shall be of the panel type and located behind the panel, if possible. A removable back plate shall allow access to the interior of the master control center for servicing. There should be adequate space behind the panel for easy access by the servicing technician.

The spray equipment to be electrically controlled by means of toggle switches and solenoid valves.

The control boxes shall be equipped with one (1), three (3) position toggle switch for each paint gun. Switch positions to be up for solid line, center for neutral and down for automatic.

A lock toggle switch will be supplied in each box to raise or lower the respective carriage by solenoid valve operation. It should be distinct from the paint gun switches to prevent operator confusion while striping.

Electronic Timer:

Two solid state electronic timers and micro processors shall be supplied, one each for left and right side skip operation. Skipline Serial System or approved equal.

The timer shall be adjustable by the operator while the machine is in motion or standing still. They should be able to time skip patterns for left and right synchronized or independent operation if striping from both sides.

The timers shall be adjustable so that any combination of skip and paint may be obtained from 00.1 to 99.9 feet., adjustable by 0.1 ft. increments.

The timers shall be equipped with an "advance" and "retard" switch which will advance or retard the cycle in increments of 0.20 of a foot per actuation of the respective switch. This switch shall be located in the remote control operator panels.

A provision to start the cycle with the paint portion of the cycle or with the skip portion shall be selectable.

On command, the timers shall immediately reset to "ready" or "start cycle"



position. The reset switch shall be located in the remote control operator panels. There shall also be an off position.

All adjustments must be so that these functional changes can be made readily by the operator while the machine is in motion or stopped.

Timing system shall operate at speeds up to 15 MPH, minimum at ambient temperatures of from thirty (30) to one hundred seventy five (175) degrees F.

The timers shall have a digital display with simple controls and inputs.

All components must be solid state and there shall be no moving parts, except the encoder, and this shall be electrically connected with no mechanical connections.

The unit shall provide for bead gun delay to fully cover the paint line.

The unit shall be pulsed from the drive shaft.

Timer shall keep a constant cycle for 2 line striping when a skip line switches from one paint gun to the other as the gun switch goes through neutral.

Footage Counters:

A six (6) digit, digital reset, footage meter capable of measuring actual feet of line applied shall be supplied for each spray gun position.

These footage meters to be mounted in the master control center.

A six (6) digit digital reset gallon meter in the control center capable of measuring the flow meter read-outs.

Solvent and Oil Systems:

An air operated, solvent cleaning system shall be installed on the striping machine.

The cleaning system shall consist of a 20 gallon minimum stainless steel ASME pressure tank, with safety valve, plus valves and piping necessary to introduce solvent to each paint line. The tank shall have a quick release refill opening at least 3 inches in diameter with 2" ball valve. Solvent shall also be piped to each main line after the tank shut off, before and after the heat exchangers, and at the paint manifolds.

A solvent dusting or cleaning gun shall be provided with an industrial mechanical rewind hose reel containing 25 feet of 3/8 (0.375) inch I.D. solvent resistant Binks Fluidall (or equal) industrial hose for washing down the paint guns and carriages. Hose reel is to be located on the rear of the platform.

All valves used in the solvent system shall be ball type with Teflon seals.

Oil system to consist of a minimum 10 gallon tank with safety valve, oil valve, air valve, piping, hose quick couplings and industrial mechanical rewind hose reel containing 25 foot of hose with spray nozzle for coating



outriggers prior to painting (located on the rear of the platform). The tank shall have a quick release refill opening at least 3 inches in diameter.

Enclosed Cab:

An enclosed cab will be built at the rear of the work platform to house the operator(s) and all paint operating controls will be specifically designed to provide protection of the operator(s) in the event of equipment rollover. The cab shall be a high visibility design which allows viewing the spray gun carriages. The paint striper operator's cab to be all 10 gauge aluminum welded construction, fully enclosed, insulated and sound level to be below 85 Dab. The mounting shall be by risers and web plates to place the enclosure floor level with the equipment deck. The cab will be of modular construction, allowing it to be detached from the frame rails for service. The cab to be approximately 96" wide and 60" deep with a minimum inside ceiling height of 78".

Doors:

The enclosure shall be equipped with two doors. One at the right hand front corner and one at the center rear. Each door shall be equipped with a key lock (both doors keyed alike). Doors to have windows top and bottom for operator visibility.

CONTROL STATION:

The control stations will be set up with 1 station on each side complete with all controls, seats, and gauges needed to operate each respective side. The switch panel location will provide good visual and manual control of gauges and switches. A system kill switch to be located conveniently to both rear operators. Two (2) 12-volt dome lights, with independent switches located in the control area, shall be installed in operators cab.

Windows:

Bay windows will be constructed so that the armrest and the portion of the operator's seat can be slid over into window area for better visibility and better ergonomics for the operator. The bay windows will be constructed of heavily tinted, safety type glass with a minimum of 2500 square inches of glass area per side. Slide or pop out windows in front of and behind each operator's station will be provided. The design of the cab shall allow operators full carriage visibility with windows closed.

Seats:

Two (2) operator seats will be Bostrom (or equal) high back, able to swivel, have forward, backward, and vertical adjustments, air ride, with fold up arm rests and cloth seat covering. Seat belts will be lap and shoulder belts for both operator positions.

Radio:

To have an AM/FM cassette radio with speakers mounted in the upper front corners.

ACCESSORIES:

Heating and air conditioning will be provided in the rear cab. It shall be separate from the truck air conditioning system. Heat may be taken from the auxiliary engine coolant system or a combination heat/cool unit may be used. If auxiliary engine coolant is used, then proper valves to isolate the system



at the engine shall be used. Air conditioner condenser should be mounted in a permanent manner and not require removal for normal operations.

Rear Mounted Arrow Board:

The flashing arrow board (Lear Siegler Model 3000 ACHAS or equal)shall be a sign panel equipped with amber lamps which are to be electronically activated by means of a solid state logic circuitry to form the various configurations. Controls to be mounted in truck cab. Unit must be able to tilt flat for transport by means of an electric actuator.

The sign panel shall be installed so that the bottom of the sign when in an upright position provides a minimum clearance of 7'0" with a maximum height of 8'6" measured from the ground. The sign panel shall be carried in a horizontal travel position. The frame shall be provided with latches to secure the sign panel in the horizontal and vertical positions. Control for the sign panel to be located in truck cab.

Lights:

Cab to have 48 inch four rotator amber light bar (Star brand Preferred) on

Strobe Lights:

Four (4) each, Whelen model 97 stroblights or equal, with power source, two (2) each, appropriately mounted on the truck chassis cab and two (2) each, flush mounted on the upper rear of the stripe cab. Exact locations to be decided during paper pilot.

Intercom System:

An inter-communication system shall be furnished to provide vocal communication between the driver of the vehicle and operators of the striping equipment and driver of the follow-up vehicle. It shall be wired to accept a 2-way radio system installed in the truck cab.

The intercom shall be located in the rear cab and be of solid state design with transistorized hardware.

Each striping equipment operator's position and the vehicle driver's position shall have overhead jacks for remote voice activated headsets. Four voice activated headsets WITH cords shall be included. Each operators position shall have a foot pedal to activate the 2-way radio.

The system shall be of heavy duty construction with shielded metal conduit and be interference free and vibration proof.

The inter-communication system shall be a David Clark U-3800 master station, One (1) U-3801 at the left operator station, One (1) with U-3815 remote interface (to tie into DOT's radio) or equal. Two (2) H3341 or equal headsets with dual earphones shall be provided for the operators of the striping equipment. Two (2) H3341 or equal headsets shall be provided for the vehicle driver. System cords shall be located so as not to interfere with the operation of the other equipment. One additional plug-in jack shall be supplied in the center console of operators cab.

Electrical Wiring:

All electrical systems shall be contained in loom, and terminate at weather-



proof barrier and controls shall operate from the machine's 12 volt system.

All lugs or connections will be insulated crimp on type or soldered with rosin core solder.

Wiring subject to exposure shall be sealed with R.T.V. silicone sealant.

All electronic circuits shall have appropriate transient voltage spike protection.

Mud Flaps:

Aluminum or poly fenders, one (1) piece (running full length of the tandems), are to be mounted over rear duals to protect the plumbing and other components beneath the platform. The front and rear portion of the fender is to be sloped downward both fore and aft of the tires.

Paint:

Color to be white, matching and of same type and quality as the truck chassis-cab exterior color. A minimum of one primer coat and two finish coats shall be applied to all metal parts. Final paint must be of a top line quality, applied properly, consisting of good coverage with no runs or flaws of any kind. The warranty must cover the paint from fading, chipping, and discoloring of any sort.

Supplier shall give three (3) days notice when actual delivery will be made.

The new unit is to be delivered to the location designated on the bid form, complete, assembled, and ready for use.

The total system shall be flushed and cleaned before delivery.

Placards:

To have safety placards on all four (4) sides of striper unit with changeable (flip type) characters, and include a full set of characters for all that may apply.

Camera System:

To have color camera guidance system with closed circuit TV system. Camera's, cables and connections used will provide maximum weather resistance. Cameras are to include padded storage cases for when cameras are removed and when not in use. Connections are to include caps for when cameras are removed and when not in use.

To have Two (2) Panasonic Cameras Model # WVCP-454 mounted on a hydraulic carriage directly in the front of paint carriages shall be provided. Controls for running each camera in and out shall be located conveniently for driver in the front cab. Cameras mounted to minimize vibration.

- One (1) monitor, Tote Vision LCD Model # 1040 (or equal) shall be conveniently mounted in the front cab for the driver to observe without tilting his head and still not obscure vision while driving.
- One (1) Saveline dual movable cross hair generator, Model # JV-2000 (or equal).



Back-Up:

To have a back-up alarm, electronic, self-adjusting sound level (Acorn Products, model 1D-112AA) or equal.

Miscellaneous:

Shall provide a factory technician for at least three (3) days of instruction while the unit is in actual striping operation, at initial setup, and an additional 1 days of instruction approximately 60 days after initial setup.

All fluid lines shall be tagged on each end with a stainless steel tag to identify and label fluid type.

Install two (2) sealed beam back up lights on rear of unit to be activated when truck transmission is placed in reverse.

Install wide load signs both front and rear. Signs shall be minimum of 4 ft. wide with 6 " lettering.

Install clearance marker lights on rear of operators cab. Rear cab is 9 % ft. wide.

Unit shall be equipped with six (6) sealed beam work lights: Two to be mounted on truck cab to illuminate tote tank area, two to be mounted on top of operator's cab and positioned to illuminate paint carriages and two to be mounted below work platform and positioned to illuminate paint carriages.

Two (2) water proof toolboxes shall be provided and mounted for ease of access from ground. To be discussed at paper pilot.

Two(2) 20-lb. dry powder fire extinguishers with visible pressure cap gauge, one mounted on each side of the truck bed shall be provided.

Each bidder will include a set of professional quality blueprints of the finished striper. These drawings will include, but are not limited to, the deck layout with weight calculations, paint, electrical, and hydraulic schematics.

Finished unit must be of standard manufacturer construction. Prototype units will not be accepted. Successful bidder will have to provide at least three individual references with names and phone numbers of the agencies that have received and are using like equipment.

Spare Parts:

To include: manufacturer's pump rebuild kit for each pump provided.

To include: four (4) each, spare complete bead gun assemblies.

To include: four (4) each, spare complete paint gun assemblies.

OPTION:

Two (2) Myraid safety beams which activate radar detectors. One safety beam to be mounted on the front of the truck and one to be mounted on the rear.

- 1- MYRIAD SAFETY BEAM OPTION PRICE \$580.00/EACH
- 2- MYRIAD SAFETY SPEED SENTRY OPTION PRICE \$9,300.00/EACH



The vendor will be required to furnish three (3) complete parts books, three (3) complete shop manuals and three (3) operators manuals for the striping equipment and components. The cost should be considered and included with bid. These manuals $\underline{\text{must}}$ include the following information as a minimum:

- -A list of mechanical parts.
- -A list of electrical parts including lights, with manufacturer and part number.
- -An electrical circuit diagram.
- -A list of hydraulic components (pump, valves, filters)giving manufacturer, and part number.
- -A hydraulic circuit description describing the function of the system.
- -A hydraulic schematic circuit diagram using standard component symbols.
- -A hydraulic circuit diagram using component pictorials and giving hose assembly numbers.
- -A list of hydraulic and paint hose assemblies giving hose type, assembly length, fittings and connection points.
- -A trouble shooting guide.
- -Adjustment and calibration procedure.

Cost of these manuals is to be included in the price.

DELIVERY:

To be 120 days or less after vendor's receipt of purchase order.

OUALITY:

The units will be inspected when delivered.

Design, materials and components are to be as specified, or when not specified, are to be as generally furnished for the intended service. Welds are to be of general good workmanship and conform to AWS D1.1 and D1.2 standards. Paint and finish details are to be of good workmanship and appearance. All painted surfaces must first be free of rust and foreign materials, and be properly sealed and/or primed.

Units failing this inspection will not be accepted.

The entire unit shall be manufactured in accordance with the latest and best manufacturing practices and all components shall be new and of best quality.

All hoses, fittings, fasteners, bolts, and miscellaneous hardware used, shall be properly designed and engineered for the purpose for which it is being used. The use of the finest quality workmanship and the best quality of materials is mandatory.

FINET COMMODITY CODE (S):

76572000000 - STRIPING MACHINES AND ACCESSORIES

REPORTS:

THE CONTRACTOR WILL SUBMIT YEARLY REPORTS TO THE STATE PURCHASING AGENT (DEBBIE GUNDERSEN) SHOWING QUANTITIES AND DOLLAR VOLUME OF PURCHASES BY EACH AGENCY AND POLITICAL SUBDIVISION. THIS REPORT WILL BE DUE 01/01/02.